

[METHOD OF FABRICATING POLYSILICON FILM]

Abstract

A method of fabricating polycrystalline silicon layer of TFT is provided. The method includes sequentially forming an insulating layer, a first amorphous silicon layer, and a cap layer on a substrate. A laser annealing is performed to transform the first amorphous silicon layer to a first polycrystalline silicon layer, wherein at least one hole is formed in the amorphous silicon layer during the laser annealing process. Thereafter, the cap layer is removed. A portion of the insulating layer exposed within the hole is removed to form a second opening. A second amorphous silicon layer is formed over the first polycrystalline silicon layer filling the second opening. Finally a second annealing is performed to transform the second amorphous silicon layer to a second polycrystalline silicon layer.